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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/693,518

10/19/2000

Margaret Motamed

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07/02/2004

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EXAMINER

GHEE, ASHANTI

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,518

Applicant(s)

MOTAMED ET AL.

Examiner

Ashanti Ghee

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6.11</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of multiple paragraphs and undue length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 13, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Mastie et al. (US Patent No. 6,498,656).

Regarding claims 1 and 13, Mastie discloses a method for performing a single print job between a plurality of printers connected to a computer through a communication means, comprising: determining (determining) with said computer (printer manager 6 can be a computer col. 4, lines 36-42) through which of said plurality of printers (physical printers 12a, b, c, d) said print job (printer job) is to be transmitted (to route) so as to balance (load balancing reads on so as to balance) said print job (printer job) between said plurality of printers (12a, b, c, d) based on a load balancing scheme (load balancing; col. 7, lines 61-col. 8, lines 1-29 and col. 6, lines 29-48);

transmitting (links) through said communication means (network system 14 reads on communication means; col. 4, lines 22-25), said print job (printer job) to said plurality of printers (12a, b, c, d) based on said load balancing scheme (load balancing; col. 7, lines 61-col. 8, lines 1-29); printing (printing) said print job (printer job) by said plurality of printers (12a, b, c, d; col. 8, lines 7-12).

Regarding claims 4 and 16, Mastie discloses the method wherein said load balancing scheme divides said print job by page number (col. 7, lines 32-37).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 5, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Utsunomiya (US Patent Publication No. 2004/0042042).

Regarding claims 2 and 14, Mastie does not disclose wherein said load balancing scheme divides print job by sets.

However, Utsunomiya discloses the method wherein said load balancing scheme divides print job by sets (paragraph 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Utsunomiya

due to both references disclosing a printing system that includes a plurality of printers connected to a network to provide image data processing in which the user can easily arrange the sheets printed utilizing a plurality of image printing apparatuses.

Regarding claims 5 and 17, Mastie does not disclose wherein said plurality of printers is user defined.

However, Utsunomiya discloses the method wherein said plurality of printers is user defined (paragraph 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Utsunomiya due to both references disclosing a printing system that includes a plurality of printers connected to a network to provide image data processing in which the user can easily arrange the sheets printed utilizing a plurality of image printing apparatuses.

6. Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Roberts et al. (US Patent No. 6,498,656).

Regarding claims 3 and 15, Mastie does not disclose wherein said load balancing scheme divides said print job by sending pages with no color to black-and-white printers and send pages with color to color capable printers.

However, Roberts discloses the method wherein said load balancing scheme divides said print job by sending pages with no color to black-and-white printers and send pages with color to color capable printers (col. 6, lines 56-63).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Roberts due to both references disclosing distributing documents among multiple output devices to automatically route pages of a document to a particular output device based on characteristics of each page.

7. Claims 6, 12, 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Kageyama et al. (US Patent No. 5,625,757).

Regarding claims 6 and 18, Mastie does not disclose wherein a printer from said plurality of printers is removed upon an error.

However, Kageyama discloses the method wherein a printer from said plurality of printers is removed upon an error (col. 17, lines 14-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Kageyama due to both references disclosing distributing documents among multiple output devices to provide a printing system which can solve the problems of the conventional techniques by handling detailed printer information of printers in a printing system.

Regarding claims 12 and 24, Mastie does not disclose wherein a print job is rerouted in the event of printer error based upon factors which may include any of the state of any or all eligible, the type of error, user defined, and interactive options.

However, Kageyama discloses the method wherein a print job is rerouted in the event of printer error based upon factors which may include any of the state of any or all eligible, the type of error, user defined, and interactive options (col. 17, lines 14-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Kageyama due to both references disclosing distributing documents among multiple output devices to provide a printing system which can solve the problems of the conventional techniques by handling detailed printer information of printers in a printing system.

8. Claims 7-8, 11, 19-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Owa et al. (US Patent Publication No. 2001/0043357).

Regarding claims 7 and 19, Mastie does not disclose wherein said print job has a user defined priority.

However, Owa discloses the method wherein said print job has a user defined priority (paragraphs 45-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Owa due to both references disclosing a printing system with multiple printers connected by a network to provide a printing system and method that can select an optimum printer for printing from among printers connected to a host computer and enable effective use of

the printer without the need for the user to keep track of the performance and specifications of available printers.

Regarding claims 8 and 20, Mastie does not disclose wherein said priority puts said print job first amongst all queued print jobs.

However, Owa discloses the method wherein said priority puts said print job first amongst all queued print jobs (paragraph 58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Owa due to both references disclosing a printing system with multiple printers connected by a network to provide a printing system and method that can select an optimum printer for printing from among printers connected to a host computer and enable effective use of the printer without the need for the user to keep track of the performance and specifications of available printers.

Regarding claims 11 and 23, Mastie does not disclose wherein said user defined priority is a print speed threshold.

However, Owa discloses the method wherein said user defined priority is a print speed threshold (paragraphs 49-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Owa due to both references disclosing a printing system with multiple printers connected by a network to provide a printing system and method that can select an optimum printer for printing from among printers connected to a host computer and enable effective use of

the printer without the need for the user to keep track of the performance and specifications of available printers.

9. Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Yacoub (US Patent No. 6,452,692).

Regarding claims 9 and 21, Mastie does not disclose wherein said priority delays said print job until all other queued print jobs are preformed.

However, Yacoub discloses the method wherein said priority delays said print job until all other queued print jobs are preformed (col. 4, lines 44-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Yacoub due to both references disclosing multiple printers connected to a computer(s) by way of a network to minimize the necessity of user interaction in the printing process.

10. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al. (US Patent No. 6,498,656) further in view of Yamaguchi et al. (US Patent Publication No. 2003/0123079).

Regarding claims 10 and 22, Mastie does not disclose wherein said priority queues said print job at a specific date and time.

However, Yamaguchi discloses the method wherein said priority queues said print job at a specific date and time (paragraph 272).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mastie and Yamaguchi due to both references disclosing a networked image forming system to eliminate a vain print output so as to print and output updated new information.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okada et al. (US Patent No. 5,880,447) discloses a data output controller and data output system using this output controller.

Beck (US Patent No. 6,275,299) discloses a multiple spooler printing system.


Shimada (US Patent Publication No. 2004/0061896) discloses printing with a plurality of printers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashanti Ghee whose telephone number is (703) 306-3443. The examiner can normally be reached on Mon-Thurs and alt. Fri. (7-4PM).

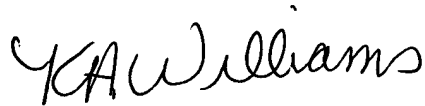
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AG
June 25, 2004

Ashanti Ghee
Examiner
Art Unit 2626


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER